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Remarks/Arguments

The Office Action mailed on June 21, 2007 has been reviewed and carefully considered.

Claims 1 and 7 have been amended. Claims 4 and 10 have been canceled. Claims 1-3, 5-9 and 11 are now pending in this application.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

Claims 1-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Baldwin et al. (U.S. Patent No. 7,171,624 B2) in view of Lavallee et al. (U.S. Patent No. 7,003,527).

Before addressing the outstanding rejections, applicant will briefly summarize the invention to better assist the Examiner in appreciating the differences between applicant's claimed invention and the art of record. The present principles include a method and apparatus for managing storage devices. One aspect of the present principles is low-level management of storage devices originating from different manufacturers, which are associated with a single host system (10), such as a personal computer or mini-computer (see Applicant's Specification Page 2, lines 32-33 to Page 3, lines 1-3; Page 2, lines 12-13). Operating characteristics of the storage devices are often unique due to their origination from different manufacturers (see Applicant's Specification, Page 3, lines 2-3). Thus, storage devices may be better managed by taking their individual operating characteristics into account (see Applicant's Specification, Page 3, lines 2-3).

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According to another aspect of the present principles, the operating characteristics of each device are compiled, stored and displayed to the user. The operating characteristics include at least one of operational rules, commands, or processing routines of each device (see Applicant's Specification, Page 3, lines 17-18). Based upon the display of operating characteristics and other information about the storage devices, the user may configure the internal operation of the storage devices (see Applicant's Specification, Page 5, lines 17-19). Among other things, the user may set each storage device system clock, load vendor specific firmware to individual devices; or start or stop one or more consistency check operations (see Applicant's Specification, Page 5, lines 25-33 to Page 6, lines 1-7).

Baldwin includes a method and apparatus for managing a storage area network (SAN). The method and apparatus disclosed in Baldwin is primarily concerned with the interconnectivity of hosts and storage devices on the network as well as configuration of access of specific storage devices by different hosts (see, e.g., Baldwin, Column 1, lines 61-67; Column 2 lines 1-6). Baldwin discloses employing a manager process or device in combination with several agent processes or devices that are associated with each host on the network (see Baldwin, Column 2, lines 39-43). The agent processes identify their associated hosts, the interconnectivity of the hosts, and the storage units that are coupled to the hosts via the interconnect (see Baldwin, Column 2, lines 43-47).

The information compiled by the agent processes or devices result in a topological representation of hosts and storage devices on the storage area network, according to which a user may manage the network (see Baldwin Column 4, lines 55-58). Information compiled by the agent processes in Baldwin include vendor information (see Baldwin,

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Figure 17), the vendor identification number of the storage device (see Baldwin, Figure 17), the capacity of the storage device (see Baldwin, Column 39, lines 18-27), whether the storage device has been added to or removed from the SAN, whether attributes of the device were modified, and whether there was a change in the relationship between the device and hosts (see Baldwin, Column 39, lines 48-52).

Baldwin additionally discloses compiling and employing management information for network devices such as switches and hubs (see Baldwin Column 78, lines 28-35). The management information describes types of particular management methods for the network devices, such as Telnet, URL, Applications, SNMP, as well as other aspects associated with network devices (see Baldwin Column 79, lines 58-67 to Column 80, lines 1-26).

Baldwin does not disclose or suggest, however, "determining if the requested execution complies with the operational rules of the at least one storage device." In asserting this rejection, the Examiner has cited Baldwin at Paragraphs 414, 422 and 189 as allegedly showing this feature of the claims principles. Initially, applicant would like to point out that there are no paragraph numbers in USP 7171624, thus making a review of the Examiner's rejections overly burdensome on applicant. Notwithstanding the foregoing, The "rules" section is at Column 78, line 11 (paragraph 414), the control character section is at Column 78, line 56 (paragraph 422), and the "severe error message" is at Column 43, line 58 (paragraph 281 by applicant's count). No where in these cited passages, can applicant find any teaching where a determination is made as to whether the execution of the at least one process "complies" with the operational rules for the identified

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storage device. Furthermore, there is no discussion, nor remote mention of the blocking of an execution when there is no compliance with the operational rules.

According to Baldwin, the "rule" itself is comprised of two sections, the id section and the management section. The id section is used to uniquely identify the device to be managed. The management information relates to a certain method for managing a particular device. (Col. 78, lines 11-20). The management information section is comprised of: 1) Type – one of four types: a) Telnet; b) URL; c) Application; d) SNMP; 2) Primary – a Boolean value indicating if this is a primary management method for the device; 3) Command – command section containing the command format and static parameters, and the discovered parameters. (Col. 80, lines 1-8).

Again, no where in the disclosure of Baldwin is there a discussion that the id section and/or management information section, operates to determine if a requested execution of a process "complies" with the operational rules for that storage device.

It is within the Discover engine database of Baldwin that the generation of a severe error message can happen, as cited by the Examiner. This error is generated in the event of a significant mismatch between databases (See Col. 43, lines 57-61). There is nothing in this section that suggests this error is generation when "compliance" with operational rules of the storage device is not found. The mismatch in databases does not remotely suggest a compliance check with the operational rules of a particular storage device in the network.

The patent to Lavalee discloses a method and apparatus for managing devices within storage area networks, but does not seem to disclose or suggest this above-mentioned concepts that distinguish the present principles from the primary cited reference to Baldwin et al. Lavalee does discuss the handling of vendor specific devices and

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provides a management station which includes a management application that operates in an application programming interface designed for universal management and control of elements manufactures or provided from different vendors within a storage network. However, in reviewing the disclosure of Lavalee, and particularly the discussions relating to the master functional component of the same, it is clear that Lavalee does not provide any disclosure or suggestion relating to determining if a requested execution of a process complies with operational rules for a particular storage device.

In view of the foregoing, it is believed that independent claims 1 and 7 are patentability distinct from Baldwin, taken singly or in any combination with the teachings of Lavalee.

Claim 1 has been amended to clarify the present principles. Claim 1 includes a method for managing at least one storage device, wherein the processing includes a determination as to whether the requested execution complies with the operational rules for the particular storage device. Thus, the present principles are distinguished from Baldwin, and/or Lavalee, as both fails to disclose this aspect of applicant's claimed principles.

Claim 7 has been similarly amended to clarify the present principles. As discussed above, the present principles are distinguished from Baldwin taken singly or in combination with Lavalee because both fail to disclose this aspect of applicant's claimed principles.

Accordingly, for at least the reasons stated above, claims 1 and 7 are believed to be in condition for allowance. Claims 1-3, 5-9 and 11 are believed to be in condition for allowance due at least to their dependencies from claims 1 and 7 respectively.

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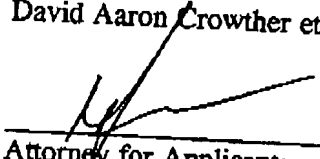
**AUG 21 2007**

In view of the foregoing, Applicant respectfully requests that the rejections of the claims set forth in the Office Action of June 21, 2007 be withdrawn, that pending claims 1-3, 5-9 and 11 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's representatives Deposit Account No. 07-0832.

Respectfully submitted,

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